

**Results:** In cycle 1, 52 patients had BCS with departmental X-ray. 28.9% required a second operation (13.5%-cavity shaves, 15.4%-mastectomy); a further 13% of those requiring a second procedure required a third (mastectomy). In cycle 2, 60% of 70 patients underwent resection with in-theatre Faxitron assessment. 21.4% required a second procedure (14.3%-cavity shaves, 7.1%-mastectomy); none required a third.

**Conclusion:** Faxitron is effective, accurate and at least comparable to standard departmental x-ray. It is therefore safe to use alone in margin assessment. This series suggests that Faxitron may reduce re-operation rates (28.9%vs21.4%,  $p=0.68$ ) and increase overall breast conservation (80.8%vs91.4%,  $p=0.11$ ). However, this needs to be formally assessed in a prospective study.

#### 0903: IS THERE ADDED VALUE IN INCLUDING CT PELVIS AS PART OF CT STAGING IN NODE POSITIVE BREAST CANCER?

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**Aim:** The aim of this study was to assess the value of including Computed Tomography (CT) of pelvis as part of CT staging in patients with node positive breast cancer who have undergone primary surgical treatment. Current common practice in our unit is CT Thorax + Abdomen + Pelvis (CT TAP) and Bone scan.

**Methods:** 100 patients who have undergone primary surgical treatment for breast cancer and were confirmed node positive proceeded to staging for distant metastasis (CT TAP and Bone scan) were retrospectively identified. We investigated the findings of these pelvic CTs.

**Results:** 71 (71%) patients were confirmed to have negative results and 26 (26%) benign result. 3 (3%) patients had results suspicious of bony metastasis - in 1 of these 3 (1%) pelvic CT was required to confirm indeterminate Bone scan findings and remaining 2 (2%) had Bone scan diagnostic of bony metastasis.

**Conclusion:** Based on our results the routine use of pelvic CT as part of CT staging in patients with node positive breast cancer who have undergone primary surgical treatment proves to be of very limited value with minimal pick-up rate of metastatic disease.

#### 0920: AN AUDIT OF RE-EXCISION FOR CLOSE OR INVOLVED MARGINS FOLLOWING BREAST SURGERY

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**Aim:** Re-excision rates in our breast cancer patients were audited in view of recently revised guidelines about any clear surgical margin being acceptable rather than the currently used 1mm margin for invasive disease.

**Methods:** Data was collected prospectively for all cancer operations from 1 August 2012 to 31 July 2014. Patients with positive margins were identified and their pathology was analysed.

**Results:** There were 317 wide local excisions performed. 62 patients (19%) had re-excision or completion mastectomy. Of these, 26 patients had no further cancer or DCIS in the surgical re-excision specimen (42%). Of the 7 patients that had clear but close margins the clearance ranged from 0.04–0.8mm. Of the 36 patients who had further disease in their re-excisions, 19 (53%) had extensive residual disease, all required mastectomy. 15 patients had only small foci of further disease and were able to have successful breast conservation. Most positive margins were radiologically occult DCIS with two cases of more extensive lobular cancer.

**Conclusion:** There was a re-excision rate of 19% which is comparable with other reported series. There were only seven patients who would have potentially benefitted from the new guidelines and avoided further surgery (2% of patients undergoing WLE).

## Posters: Cardiothoracic Surgery

#### 0003: DIAGNOSTIC VALUE OF PLEURAL FLUID CYTOLOGY IN CARDIOTHORACIC SURGERY

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**Aim:** The aim of this retrospective study was to evaluate the role of pleural fluid sampling for cytology during cardiothoracic procedures. BTS guidelines suggest that cytology has a sensitivity of 60% for malignant pleural effusion. However, sensitivities quoted in the literature range from 40–90%.

**Methods:** We investigated the results of all pleural fluid samples taken during cardiothoracic procedures over a 9-month period at a single centre. All were obtained from video-assisted thoracoscopy (VATS) or open thoracotomy. Cytology results were compared with pleural/tissue sample histopathology reports, and with pleural aspirations taken previously at other centres.

**Results:** 23 effusions were secondary to mesothelioma, 5 secondary to non-small cell lung carcinoma and 5 secondary to other metastatic malignancies. 17 patients with cytology reported as negative for malignancy were subsequently diagnosed with malignancy by pleural biopsy. The sensitivity of cytology for malignant effusion at our centre was 39.3%, with specificity of 100%. Negative predictive value was 45.2% and positive predictive value 100%.

**Conclusion:** Despite finding that cytology has a high specificity for malignancy, our study suggests that pleural fluid sampling is not helpful in diagnosing malignant pleural effusion in the cardiothoracic setting if pleural biopsy is also used.

#### 0105: EXPERT-LED CARDIAC BASIC SCIENCE TEACHING IN AN INTEGRATED CLINICAL LEARNING ENVIRONMENT: IMPROVING GLOBAL EDUCATIONAL OUTCOMES FOR UNDERGRADUATES

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**Aim:** Although modern undergraduate medical curriculums aim to use spiral approaches, integrating basic sciences, especially anatomy, in clinical rotations has proven difficult. In surgical specialties, poor understanding of basic principles is attributed to both falling standards and applicant numbers to postgraduate training programmes. We designed an expert led teaching programme reviewing cardiac anatomy and physiology utilising dissection of porcine hearts framed within the clinical context of cardiac surgery.

**Methods:** 18 delegates underwent a comprehensive integrated cardiac teaching course led by a consultant cardiac surgeon. Pre and post-course examinations and questionnaires were used to assess knowledge and a range of delegate views.

**Results:** There was a 17.5% improvement between delegates pre and post-course examination scores ( $P < 0.01$ ). Appreciation of underlying sciences as a basis for clinical practice also improved, as did secondary outcomes in basic surgical skills. Delivery by a consultant cardiac surgeon was regarded as beneficial for contextualising knowledge and providing inspiration for career plans.

**Conclusion:** An expert led integrated approach is a highly effective way of teaching basic sciences to clinical medical students. It allows students to recognise role models and plan for future careers. We recommend that this teaching style becomes more widely used in teaching programmes.

#### 0217: MANAGEMENT OPTIONS AND OUTCOMES IN AIRWAY-OESOPHAGEAL FISTULAE PATIENTS: A 2009–2013 CASE SERIES

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**Aims:** Airway-oesophageal fistulae (AOF) are usually managed by stenting or surgery. The condition has historically had high morbidity and mortality rates. The aim was to assess outcomes in modern practice.

**Methods:** Patients treated for AOF at our institution between 2009–13 were reviewed. Demographics, aetiology, management and outcomes were recorded. A Kaplan-Meier graph of overall survival was plotted.